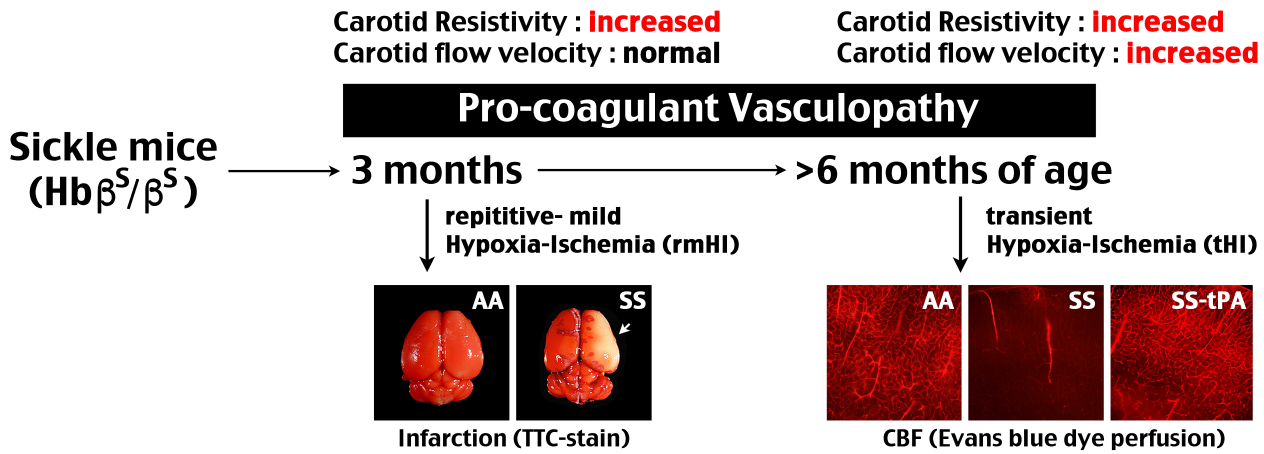
Visual Abstract (STROKE/2017/018334):



Humanized sickle mice develop a higher sensitivity to repetitive-mild hypoxia-ischemia (rmHI)-induced cerebral infarct at 3 months of age, and transient hypoxia-ischemia (tHI)-induced perfusion deficits and mortality at 6 months of age. The progression of pro-coagulant vasculopathy in sickle mice is paralleled by alterations in the carotid artery blood flow and pulse-waveforms. At 3 months of age, sickle mice show greater resistive index but normal flow velocity. At 6 months of age, both resistive index and flow velocity are increased in sickle mice.